




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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 09/903,339   | 07/10/2001  | Naoto Kusumoto       | 07977-010004        | 8970             |
| 26171  | 7590        | 11/03/2004           | EXAMINER            |                  |
| FISH & RICHARDSON P.C.<br>1425 K STREET, N.W.<br>11TH FLOOR<br>WASHINGTON, DC 20005-3500 |             |                      | DOAN, THERESA T     |                  |
|  |             |                      | ART UNIT            | PAPER NUMBER     |
|  |             |                      | 2814                |                  |

DATE MAILED: 11/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                               |                                 |   |
|------------------------------|-------------------------------|---------------------------------|---|
| <b>Office Action Summary</b> | Application No.<br>09/903,339 | Applicant(s)<br>KUSUMOTO ET AL. |   |
|                              | Examiner<br>Theresa T Doan    | Art Unit<br>2814                |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12 July 2004.
- 2a) ☒ This action is FINAL.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) 1-24 and 37-42 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 28-30 and 34-36 is/are allowed.
- 6) ☒ Claim(s) 25-27 and 31-33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☒ Certified copies of the priority documents have been received in Application No. 08/604,547.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                              | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>07/12/04</u> | 6) <input type="checkbox"/> Other:  |

## **DETAILED ACTION**

### ***Terminal Disclaimer***

1. The terminal disclaimer filed on 07/12/04 disclaiming the terminal portion of any patent granted on this application has been reviewed and is accepted. The terminal disclaimer has been recorded.

### ***Election/Restrictions***

2. Newly submitted claims 37-42 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons:

The original claims do not require the step of "patterning the amorphous semiconductor film into a first shape amorphous semiconductor island" as required by the new claims 37-42.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 37-42 withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

4. Claims 25-27 and 31-33 are rejected under 35 U.S.C. 102(e) as being anticipated by Zhang et al. (5,508,209) as previous cited.

Zhang et al. teach in figures 5A-5F a method of manufacturing a semiconductor device comprising the steps of:

forming an amorphous silicon semiconductor film 203 over a substrate 201 (column 5, lines 25-29);

irradiating the amorphous silicon semiconductor film (column 5, lines 25-30) with a second harmonic of a continuous wave laser comprising Nd which is an Nd:YAG laser to crystallize the amorphous semiconductor film (column 9, lines 3-10); and

patterning the crystallized semiconductor film 203 to form an active layer including at least a channel formation region (see figure 5C).

***Allowable Subject Matter***

5. Claims 28-30 and 34-36 are allowed by the Terminal Disclaimer; The Terminal Disclaimer filed on 07/12/04, which is effective to overcome the nonstatutory double patenting rejection under Kusumoto et al. (U.S. Patent 6,204,099).

***Response to Arguments***

6. Applicant argues that "Zhang fails to describe or suggest irradiating the amorphous semiconductor film with a second harmonic of a continuous wave laser comprising Nd to crystallize the amorphous semiconductor film as recited in claim 25".

This argument is not persuasive because Zhang clearly discloses the steps of forming an amorphous silicon semiconductor film 203 over a substrate 201 (column 5, lines 25-29) and irradiating the amorphous silicon semiconductor film (column 5, lines 25-30) with a second harmonic of a continuous wave laser comprising Nd which is an Nd:YAG laser to crystallize the amorphous semiconductor film (column 9, lines 3-10).

The rest of applicant's arguments, addressed to the amended claims are considered in the rejections shown above.

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Theresa T Doan whose telephone number is (571) 272-1704. The examiner can normally be reached on Monday to Thursday from 7:00AM - 4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, WAEL FAHMY can be reached on (571) 272-1705. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-1562.

TD  
October 29, 2004.

  
PHAT X. CAO  
PRIMARY EXAMINER